REMARKS

The above amendments have been provided based on the format described at 1265 Off. Gaz. Pat. Office 87 (December 17, 2002) and as authorized by Deputy Commissioner for Patents, Stephen Kunin on January 31, 2003.

Claim 1 has been amended to remove the references to "energy system" and "pyrotechnic system" as well as to incorporate the limitations of claim 4, which has been canceled without prejudice for pursuit in a continuing application. The cancellation of claim 4 is not in acquiescence to any assertion made in the Office Action.

Claims 1, 2, 3, 5 and 7 have been amended to use alternative language that is more prevalent in U.S. patent practice without altering the scope of the claims. In claim 3, the word "area" has been added to expressly indicate subject matter that was implicitly present in the claim.

Claims 6 and 8-10 have also been canceled without prejudice for pursuit in a continuing application and without acquiescence to any assertion made in the Office Action.

New claims 11-22 are supported by the application and claims as originally filed. For example, support for new claims 19-22 is present at least on page 3, last 6 lines, through page 4; and page 10, last three lines.

No new matter has been introduced, and entry of the amendments is respectfully requested.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-10 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite for the use of various language. Applicants have carefully reviewed the statement of the rejection and believe that the claims are definite for the following reasons.

As an initial matter, Applicants refer to the Memorandum dated January 17, 2003 from Stephen Kunin, Deputy Commissioner for Patent Examination Policy at the U.S. PTO (copy attached). The Memorandum sets forth a clarification and immediate implementation of policy

with respect to rejections under 35 U.S.C. § 112, second paragraph. Of particular relevance to the instant rejection is the statement that

"[I]f the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. § 112, second paragraph would be appropriate."

Applicants believe that this means that if an artisan of ordinary skill can interpret the metes and bounds of the claim to avoid infringement, no rejection under 35 U.S.C. § 112, second paragraph is proper.

Additionally, Applicants point out the emphasis in the Memorandum on considering "the claim as a whole" as opposed to a focus on particular words or phrases in a claim. This is discussed further on page 2, first full paragraph, of the Memorandum which includes an example concerning the use of the phrase "such as" in a claim. This example is used to modify previous practice as set forth at MPEP 2173.05(d), upon which the instant rejection is based at least in part.

Turning to the statement of the rejection, Applicants respectfully traverse the assertion that a "[c]omplete revision of the claims" is necessary. As provided by the above amendments, the claims have generally been modified slightly by introducing the use of explicit terminology directed to subject matter implicitly present in the claims. Claim 1 for example, has been modified slightly to use Markush language and to revise the phrasing of the ranges present in the claim as originally filed. The amendment to claim 1 to delete the references to "energy" and "pyrotechnic" systems does not alter the scope of the claim, which remains directed to a non-toxic and non-corrosive ignition mixture comprising specific components. Similarly, the incorporation of limitations from claim 4 does not alter the claim scope beyond that presented in claim 4 as originally filed.

Contrary to the allegation in the statement of the rejection that the claims "appear to be a combination of method and composition", Applicants respectfully note that the allegation appears based upon the view that a "system" is necessarily a process. As evident from the application and claims as originally filed, the reference to "systems" in original claim 1 was used to define submixtures within the claimed mixture. There was no attempt to claim both product

and process in the claims. Applicants have, however, decided to amend claim 1 to delete the recitation of "system" without changing claim scope, which remains directed to a mixture comprising the particular components recited in the claims as originally filed. This amendment also addresses the alleged lack of antecedent basis for the terms.

Additionally, and also contrary to the Examiner's position, no ambiguity was introduced by claims 6 and 8-10. As noted in the statement of the rejection, "product by process" claims are permitted, and original claim 6 merely introduced a "product by process" limitation as a means of defining the claims. Due to the ongoing ambiguity in construing "product by process" claims (see *Atlantic Thermoplastics Co. v. Faytex Corp.*, 970 F.2d 834, 23 USPQ2d 1481 (Fed. Cir. 1992) and *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991)), Applicants have canceled claims 6 and 8-10 without prejudice in favor of new claims 13, 14, 17, and 18.

With respect to the allegations concerning "oxidizing agent" and the language following the term in claim 1, Applicants respectfully point out a functional limitation such as "oxidizing agent" is expressly permitted as noted at MPEP 2173.05(g) and the cases cited therein. Therefore, Applicants respectfully submit that the skilled person would have recognized "oxidizing agent" as used in the context of the claim to refer to oxidizing agents that are also "oxides and peroxides of metals" or "salts of inorganic oxygen-containing acids" or "complex salts" as recited in original claim 1. Therefore, no prima facie case of indefiniteness was present due to the use of the term. Applicants have amended claim 1 to include the limitations of claim 4 in the interest of expediting allowance of the instant application rather than in acquiescence of this rejection.

The phrase "characterized by the fact that" has been substituted by "wherein" as more commonly used in U.S. patent practice. Applicants respectfully submit that the skilled person would recognize the use of "characterized by the fact that" in the context of the claims as referring to further limitations. The claims have also been amended to expressly use Markush language as commonly found in U.S. patent practice.

With respect to the last part of the statement of the rejection and the previous use of "including diammo-copper nitrate", Applicants respectfully submit that as provided by the attached Memorandum, no issue of indefiniteness was present in the claims as originally filed.

In light of the above, Applicants respectfully submit that the claims are in compliance with 35 U.S.C. § 112, second paragraph, and withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 1-10 have been rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have carefully reviewed the statement of the rejection and traverse as follows.

The statement of the rejection appears to allege that the use of broad terms in the claims raise issues of whether the claimed subject matter is "adequately disclosed to enable practice of the invention without undue experimentation". The recitation of "oxidizers" is included as the sole example of a term alleged to be overly broad.

As a first initial matter, Applicants point out that they are confused as to whether the instant rejection is alleging an "inadequate written description" or a "lack of enablement" for the broad scope of the claims. While most of the statement of the rejection appears directed to the former, the use of the terms "enable" and "undue experimentation" suggest the latter. Applicants respectfully request clarification of which of these distinct rejections is actually intended.

As a second initial matter, Applicants point out that the use of "oxidizing agent" in claim 1 has been amended to include the particular agents previously recited in claim 4. The term as used in claim 1 is necessarily adequate described, and this rejection may be withdrawn on that basis because no issue under 35 U.S.C. § 112, first paragraph is present.

No issue of an inadequate written description is present because a skilled artisan would recognize the claims as being directed to ignition mixtures comprising components that are standard and available in the art. Moreover, the claims are supported by numerous examples presented on at least pages 5-10 of the application as filed. These examples, are representative species of the claimed genus of ignition mixtures and are sufficient to demonstrate possession of the claimed invention to the skilled artisan at the time of the invention. The statement of the

rejection provides no basis to question this, and so no *prima facie* case of inadequate written description is present.

Similarly, the rejection provides no *prima facie* case of non-enablement. As an initial matter, Applicants would like to point out that MPEP 2164.04 sets forth the standard of *In re Marzocchi* (169 USPQ 367 (CCPA 1971)) where claims must be taken as being enabled unless there is reason to doubt the objective truth of the statements of an application in support of enablement. Applicants respectfully submit that no adequate reason, such as those based upon an analysis of the factors set forth in *In re Wands*¹ (see also MPEP 2164.01(a)), has been provided in the instant rejection.

The claims are directed to ignition mixtures comprising particular components that are detailed in the claims and the specification as filed. Where is the undue experimentation to combine the components to arrive at the claimed mixtures? Applicants respectfully submit that no undue experimentation is present, and the claims are objectively enabled.

No examination as to prior art

With respect to the lack of examination as to prior art, Applicants respectfully point out the standards set forth at MPEP 2173.06 and 2043.03 which encourage the avoidance of piecemeal prosecution. In the instant case, there was **not** "a great deal of confusion and uncertainty as to the proper interpretation of the limitations" in the claims such that the standards of *In re Steele* would apply. As noted above, the amendments to the claims have been minimal and did not involve more than the use of alternative language to express limitations as subject matter which was already present. The claims were, and remain, directed to ignition mixtures comprised of specific components.

Therefore, the standards set forth in *Ex parte Ionescu* (222 USPQ 537 (Bd. App. 1984)) and *Ex parte Grasselli* (231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984)) should have been applied, and the claims fully examined on their merits.

¹ 8 USPQ.2d 1400 (Fed. Cir. 1988).

Applicants respectfully point out that the International Preliminary Examination Report (IPER) indicated that the claimed subject matter is novel and inventive (non-obvious) over the prior art of record in the International Application.

CONCLUSION

In light of the above amendments and discussion, Applicants respectfully submit that the rejections of record may be withdraw and that the claims are in condition for allowance.

Applicants urge early indication of allowability and passage of the application to issue. The Examiner is welcome to contact the undersigned if further discussions may prove useful.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 321402000200.

Respectfully submitted,

Dated:

March 17, 2003

By:

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Commissioner for Patents Washington, DC 20231 www.uspto.gov

Memorandum

Date:

January 17, 2003

To:

Technology Center Directors

Patent Examining Corps

From:

Stephen G. Kunin

Deputy Commissioner for Patent Examination Policy

Subject:

Advance notice of changes to MPEP § 2173.02 clarifying Office policy with respect to rejections made under 35 U.S.C. § 112, second paragraph in view of the Supreme Court holding in Festo Corp. v. Shoketsu Kinzoku

Kogyo Kabushiki Co., 122 S.Ct. 1831, 62 USPQ2d 1705 (2002)

This memorandum clarifies Office policy with respect to rejections made under 35 U.S.C. § 112, second paragraph. The guidance provided herein is effective immediately and should be applied by all Office personnel. These changes will be published in the next revision of the MPEP.

As noted in MPEP § 2173.02, during examination of claims for compliance with the requirements for definiteness under 35 U.S.C. § 112, second paragraph, some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. In reviewing a claim for compliance with 35 U.S.C. § 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. § 112, second paragraph by providing clear warning to others as to what constitutes infringement of the patent. See Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. § 112, second paragraph would be appropriate. See Morton Int'l, Inc. v. Cardinal Chemical Co., 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1195 (Fed. Cir. 1993). However, if other modes of expression selected by applicants satisfy the statutory requirements of 35 U.S.C. § 112, second paragraph, but the examiner merely wants the applicant to improve the clarity or precision of the language used, the claim must not be rejected under 35 U.S.C. § 112,

second paragraph, rather, the examiner should suggest improved language to the applicant.

For example, a claim recites "a suitable liquid such as the filtrate of the contaminated liquid to be filtered and solids of a filtering agent such as perlite, cellulose powder, etc." The mere use of the phrase "such as" in the claim does not by itself render the claim indefinite. Office policy is not to employ per se rules to make technical rejections. Examples of claim language which have been held to be indefinite set forth in MPEP § 2173.05(d) are fact specific and should not be applied as a per se rule. The test for definiteness under 35 U.S.C. § 112, second paragraph is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). If one skilled in the art is able to ascertain in the example above, the meaning of the terms "suitable liquid" and "solids of a filtering agent" in light of the specification, 35 U.S.C. § 112, second paragraph is satisfied.

If upon review of the claim as a whole in light of the specification, the examiner determines that a rejection under 35 U.S.C. § 112, second paragraph is not appropriate in the above-noted example, but is of the opinion that the clarity and the precision of the language can be improved by the deletion of the phrase "such as" in the claim, the examiner may make such a suggestion to the applicant. If applicant does not accept the examiner's suggestion, the examiner should not pursue the issue.

If upon review of a claim in its entirety, the examiner concludes that a rejection under 35 U.S.C. § 112, second paragraph is appropriate, such a rejection should be made and an analysis as to why the phrase(s) used in the claim is "vague and indefinite" should be included in the Office action. If applicants traverse the rejection, with or without the submission of an amendment, and the examiner considers applicants' arguments to be persuasive, the examiner should indicate in the next Office communication that the previous rejection under 35 U.S.C. § 112, second paragraph has been withdrawn and provide an explanation as to what prompted the change in the examiner's position (e.g., examiners may make specific reference to portions of applicants' remarks that were considered to be the basis as to why the previous rejection was withdrawn).

By providing an explanation as to the action taken, the examiner will enhance the clarity of the prosecution history record. As noted by the Supreme Court in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 122 S.Ct. 1831, 1838, 62 USPQ2d 1705, 1710 (2002), a clear and complete prosecution file record is important in that "[p]rosecution history estoppel requires that the claims of a patent be interpreted in light of the proceedings in the PTO during the application process." In Festo, the court held that "a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel." With respect to amendments made to comply with the requirements of 35 U.S.C. § 112, the court stated that "[i]f a § 112 amendment is truly cosmetic, then it would not narrow the patent's scope or raise an estoppel. On the other hand, if a § 112 amendment is necessary and narrows the patent's scope—even if only for the purpose of better description—estoppel may apply." Id., at 1840, 62 USPQ2d at 1712. The court further stated that "when the court is unable to determine the purpose underlying a narrowing amendment—and hence a rationale for limiting the estoppel to the surrender of particular equivalents—the court should presume that the patentee surrendered all subject

matter between the broader and the narrower language...the patentee should bear the burden of showing that the amendment does not surrender the particular equivalent in question." *Id.*, at 1842, 62 USPQ2d at 1713. Thus, whenever possible, the examiner should make the record clear by providing explicit reasoning for making or withdrawing any rejection related to 35 U.S.C. § 112, second paragraph.